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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,075	09/25/2003	Duncan Johnston-Watt	GILLP015X1	5827
22434	7590	10/07/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			KISS, ERIC B	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2192	
DATE MAILED: 10/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/671,075

Applicant(s)

JOHNSTON-WATT ET AL.

Examiner

Eric B. Kiss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 52-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20050411, 20040628.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 52-90 have been examined.

#### *Specification*

2. The disclosure is objected to because of the following informalities:

The specification contains numerous typesetting errors (i.e., incorrectly substituted characters). A few examples of this are: "Atesting@" and "AVerification@" in the third paragraph on page 1, ">while=" under Loop constructs on page 11, and "maker=s" in the sixth paragraph on page 17. This is not an exhaustive list of these errors. Appropriate correction is required.

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (see the fourth paragraph on page 2). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

4. The use of trademarks, such as JAVA, BIZTALK, WINDOWS, DELPHI, and VISUAL BASIC, has been noted in this application. Trademarks should be capitalized wherever they appear (capitalize each letter or accompany each trademark with an appropriate designation symbol, e.g., <sup>TM</sup> or ®) and be accompanied by the generic terminology (use trademarks as adjectives modifying a descriptive noun).

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 78-90 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 78-90 purport to define a "computer system". However, the bodies of the claims define only software elements absent of any hardware elements necessary for their functionality to be realized. Accordingly, these claims in their present form recite merely non-functional descriptive material, *per se*, which is not statutory.

7. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. §101 (non-statutory) above are further rejected as set forth below in anticipation of Applicant amending these claims to place them within the four statutory categories of invention.

### ***Double Patenting***

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v.*

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*Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claims 52-56, 58-60, 65-69, 71, 72, 78-82, and 84-86 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 4-8, 10-12, 20-24, 26, 27, 36-40, and 42-44, respectively, of copending Application No. 10/254,258. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 57, 61-64, 70, 73-77, 83, and 87-90 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 9, 13-15, 20, 25, 28-31, 36, 41, 45-47, and 49-51 of copending Application No. 10/254,258.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because:

As per claims 57, 61, 62, 64, 70, 73-75, 77, 83, 87, 88, and 90, the limitations in each of these dependent claims are also recited in claims 9, 13-15, 25, 28-31, 41, and 45-47, respectively, of Application '258 wherein the incorporated independent claim limitations are also recited in claims 4, 20, and 36 of Application '258. Because the claimed features are also readily combined in the cited claims of Application '258, the slight difference in scope is insufficient to render them patentably distinct.

As per claims 63, 76, and 89, these claims very broadly recite generating the executables "directly" without precluding the interpretation of the executables being directly generated from source code, which is standard industry practice, and is further suggested in claims 13, 29, and 45 of Application '258.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 52-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0034848 A1 (Moore et al) in view of US 5,890,133 (Ernst).

As per claim 52, *Moore et al.* discloses providing process representations in a process calculus notation (see, for example, paragraphs [0030] and [0031]); verifying that the representations are valid (see, for example, paragraph [0047]); generating executables and corresponding test data in accordance with the verified representations (see, for example, paragraph [0064]); testing the executables using the corresponding test data (see, for example, paragraph [0060]); deploying the tested executables in the distributed processing environment (see, for example, paragraphs [0037] through [0039]). *Moore et al.* fails to expressly disclose the combination of: monitoring the performance of the deployed executables to gather process execution information; analyzing information gathered in the monitoring step; and autonomically altering the executables and corresponding test data in accordance with analyzed process execution information. However, *Ernst* teaches a dynamic optimization procedure for such business processes, in which executing processes are monitored and the gathered information is used to modify the executables and test data (see, for example, col. 6, line 66, through col. 7, line 36). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to modify the method of *Moore et al.* to include such dynamic optimizations. One would be motivated to do so to gain the known advantages of optimizing a business process (such as those benefits disclosed in column 1 of *Ernst*).

As per claims 53-58, *Moore et al.* further fails to expressly disclose: altering the generation of executables and test data directly in accordance with analyzed process execution

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information and repeating the verification, generation, and testing steps (claims 53, 54, and 58), the generating and altering executables being performed in accordance with contextual information, including heuristics (claims 55-57). However, *Earnst* further teaches these steps as part of the disclosed dynamic optimization (see, for example, col. 6, line 66, through col. 7, line 36). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to further modify the method of *Moore et al.* to include such further steps in dynamic optimization as per the teachings of *Earnst*. One would be motivated to do so to gain the known advantages of optimizing a business process (such as those benefits disclosed in column 1 of *Earnst*).

As per claims 59 and 60, *Moore et al.* fails to expressly disclose comparing a set of representations of the analyzed process execution information with an earlier set of process representations and altering the executables to reduce significant disparities between them, and repeating the generating, testing, analyzing and altering steps until the comparison indicates the absence of significant disparity. However, *Earnst* further teaches such comparison and disparity elimination in the dynamic optimization disclosed (see, for example, col. 12, line 44, through col. 14, line 2). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to further modify the method of *Moore et al.* to include such disparity analysis as per the teachings of *Earnst*. One would be motivated to do so to gain the known advantages of optimizing a business process (such as those benefits disclosed in column 1 of *Earnst*).



As per claims 61-63, *Moore et al.* further discloses generating an intermediate version of the verified representation in a third generation language (such as the JAVA programming language or C) and compiling the intermediate version into the executables (see, for example, paragraph [0064]).

As per claim 64, *Moore et al.* further discloses the process calculus notation being based upon XML (see, for example, paragraphs [0030] and [0031]).

As per claims 65-77, these are product versions of the claimed methods discussed above (claims 52-64). *Moore et al.* further discloses such a product implementation (see paragraph [0089]).

As per claims 78-90, these are system versions of the claimed methods discussed above (claims 52-64). *Moore et al.* further discloses such a system implementation (see paragraph [0089]).

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The

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Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist:  
571-272-2100.

EBK /EBK  
September 29, 2005



TUAN DAM  
SUPERVISORY PATENT EXAMINER